

**ABSTRACT**

A detector of an absolute rotation angle and torque includes a first gear coupled to an input shaft of a torsion-bar unit, a gear A engaging with the first gear, and a first detecting section of an absolute rotation angle placed at the center of the gear A. The detector also includes a second gear coupled to an output shaft of the torsion-bar unit, a gear B engaging with the second gear, and a second detecting section of an absolute angle placed at the center of gear B.